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GB 0511062

(58) Field of search

A5R

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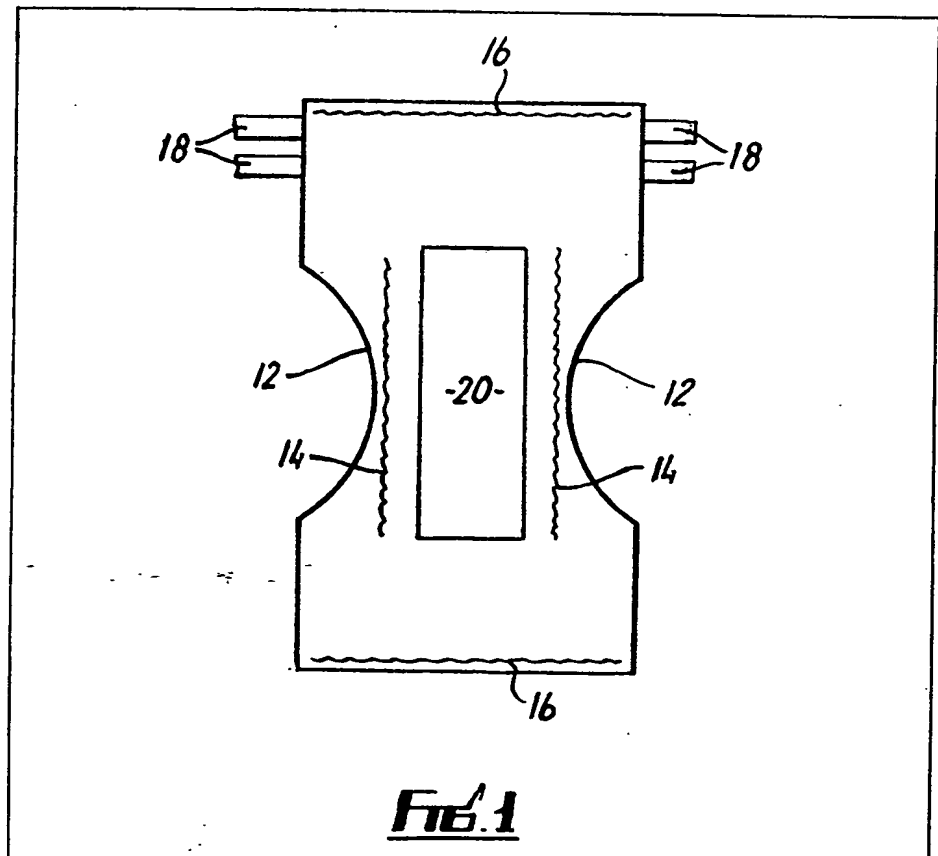
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(54) Disposable diaper

(57) To deal with adult incontinence a large number of diapers of differing size and absorbency are required. The

present invention reduces this problem by providing a two part diaper having a fabric piece to which an absorbent pad is removably secured.



The drawing originally filed was informal and the print here reproduced is taken from a later filed formal copy.

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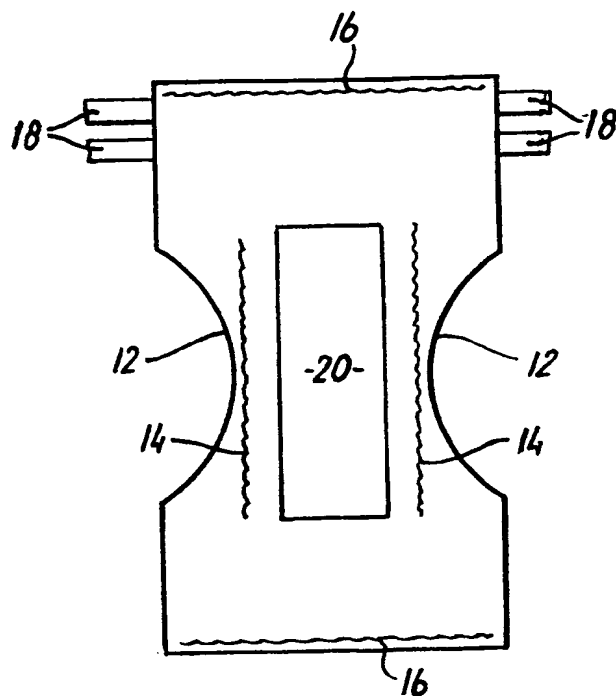


FIG. 1

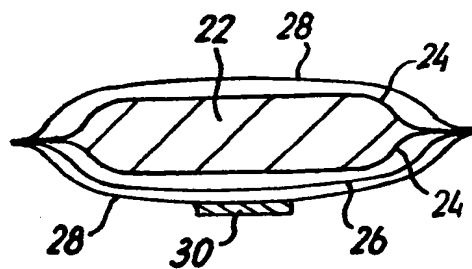


FIG. 2

SPECIFICATION

Disposable diaper

This invention relates to a disposable diaper.

There is no lasting cure for the distressing condition of adult incontinence. The most common way of dealing with that condition is to use an incontinence diaper. Such a diaper includes an absorbent pad because the amount of liquid to be collected by the diaper is usually much greater in adult incontinence than with small babies where the diaper material itself is adequate. Unlike babies who are generally much the same size adults who suffer from incontinence vary enormously in size. Institutions caring for the elderly therefore find it necessary to stock a large number of different sizes of diaper. In addition the incontinence condition of persons may vary widely so that for example a diaper of relatively low absorbency may be adequate in one case of slight incontinence and quite unsuitable in a case approaching total incontinence. To cater for these different conditions means that not only must a stock of different size diapers be kept but also a stock of diapers of different absorbency.

The present invention has been made with these problems in mind.

According to the invention there is provided a diaper comprising a piece of fabric and an absorbent pad removably fastened to said fabric in such a position as will result in the pad being located substantially in the crotch of a wearer of the diaper.

In a preferred embodiment of the invention the fabric piece is preferably 'breathable' yet water-repellent so as to be comfortable to the wearer. It is also preferred that the absorbent pad should include a liquid impervious cover on the side of the pad adjacent the fabric piece so as to prevent urine spreading from the pad through the diaper and onto clothing.

The means by which the pad is fixed to the fabric piece is such that the pad can be removed and, if desired replaced by a fresh pad. Thus the invention provides for greater versatility in the range of incontinence conditions that can be catered for with limited stocks. In addition a soiled pad can be replaced by a fresh pad thus enabling the fabric piece to be used many times over. The currently available disposable incontinence diapers are completely discarded when the pad is soiled.

A specific embodiment of the invention will now be described by way of example with reference to the accompanying drawings in which:—

Fig. 1 is a plan view of a diaper, and

Fig. 2 is a section through a pad.

Referring to the drawing the diaper comprises a fabric piece 10, preferably of breathable material such as a spunbonded polyolefin material sold under the Trade Mark "Corovin". The diaper is preferably waisted as at 12 in the illustrated embodiment. Longitudinal elastication 14 is provided in the waisted portion so that, when in

use, the diaper will be urged into contact with the legs of the wearer. Further transverse elastication 16 may be, if desired, provided at each end for gripping the waist of the wearer. Tapes 18 or other means, known per se, are provided for securing the diaper in position on a wearer. The elastication may be provided in any suitable way including elastication using bulked yarn as disclosed in our copending application No.

The absorbent characteristics of the diaper are provided by a separate pad 20 which is removably located at substantially the middle of the diaper so as to be positioned, when in use, in the crotch of the wearer. Any absorbent pad may be employed but a convenient form of pad is shown in section in Fig. 2. The pad of Fig. 2 comprises a filling 22 of fluff pulp enclosed in a liquid pervious carrier fabric 24. One side of the pad is covered with a liquid impervious material 26, for example polyvinyl chloride and the whole structure is enclosed in a cover stock 28. A double sided pressure sensitive adhesive tape 30 is fixed to the pad on the side thereof where the impervious layer 26 is located. The pad can be fixed in place on the fabric 10 by means of the tape 30.

The size of pad to be fitted on the fabric 10 is chosen in accordance with the requirements of the patient. Sizes can range, for example, from a pad weight of about 30 g using a blend of

thermomechanical pulp and sulphite pulp to give a total liquid absorbency of about 330 ml to a pad weight of about 70 g using the same pulp blend and having a liquid absorbency of about 800 ml.

Any absorbent material can be used in the pad including the so-called 'superabsorbent' materials.

As mentioned above the pad may be fixed to the fabric 10 in any suitable way provided that the pad can be removed and replaced by a fresh pad. The illustrated embodiment shows one strip of pressure sensitive tape being used. If desired two or more strips can be employed.

CLAIMS

1. A diaper comprising a piece of fabric and an absorbent pad removably fastened to said fabric in such a position as will result in the pad being located substantially in the crotch of the wearer.

2. A diaper as claimed in claim 1 wherein the fabric is breathable and water repellent.

3. A diaper as claimed in claim 1 or claim 2, wherein the pad is provided with a liquid impervious cover on the side thereof which is intended to be located adjacent the fabric.

4. A diaper as claimed in any preceding claim, wherein the pad is fixed to the fabric by means permitting the removal of said pad and replacement by a different pad.

5. A diaper as claimed in claim 4, wherein the pad fixing means comprises a tape having pressure sensitive adhesive on both sides thereof.

6. A diaper as claimed in any preceding claim wherein the fabric is of substantially rectangular shape with an intermediate portion of reduced width.

7. A diaper as claimed in claim 6, wherein longitudinal elastication is provided in the fabric in the intermediate portion.

5 8. A diaper as claimed in claim 6 or claim 7, wherein transverse elastication is provided at or adjacent an end of the fabric.

9: A diaper as claimed in any preceding claim, wherein means are provided on the fabric for securing the diaper in place on a wearer.

10 10. A diaper substantially as described herein with reference to the accompanying drawings.

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